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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,975	09/05/2003	Shigenobu Nakamura	117050	5670

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EXAMINER

CHARLES, MARCUS

ART UNIT PAPER NUMBER

3682

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/654,975

Applicant(s)

NAKAMURA, SHIGENOBU

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09-05-2003.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This is the first action relating to serial application number 10/654,975, filed 09-05-2003.

Claims 1-5 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The copending application in the IDS is not given consideration because applicant did not provide the serial number of the copending application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. (5,780,731) in view of Adachi et al. (6,201,310). Matsui et al. discloses a belt drive system driven by an internal combustion engine of an automotive vehicle, comprising a drive pulley (6) connected to a crankshaft; a plurality of driven pulleys (2, 3 and 5) connected to the system device; a belt (7) wound around the pulleys, the plurality of driven pulleys include a belt tensioner (9) that control the belt tension, and a generator having a generator pulley (4) that is engaged to the belt. Matsui et al. fail to disclose the system includes two generators. Adachi et al. disclose a drive system

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comprising first and second generators (21, 22) connected via a belt (23) so as to obtain high outputs for large electrical loads, to improve the installation freedom of the engine and to obtain crash safety. Adachi et al. also discloses that the pulley (22a) is a driving pulley and requires a clutch so as to disconnect the pulley from the shaft so as not produce power when not required and to prevent slip but pulley (21a) may not require a clutch. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Matsui et al. to include two generators and a clutch to at least one pulley in view of Adachi et al. to obtain high outputs for large electrical loads and to improve the installation freedom of the engine, to obtain crash safety and to disconnected the pulley from the shaft so as not produce power when not required and to prevent slip.

In claim 2, it is apparent that the inertia moment of the rotor of one generator is larger than that of the rotor of the second generator.

In claim 3, note the diameter of the fist generator is larger than that of the second generator.

In claim 4, since one generator is larger than the other, it is apparent that the number of conductors in each slot of a stator of the first generator is larger than the number of conductors of disposed in each slot of the second generator.

In claim 5, it is apparent the tensioner to be closer to the larger pulley of the larger generator, since the larger generator produces more power and requires greater tension.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 and 4 of copending Application No. 10/648,389 in view of Adachi et al. (6,201,310). Copending Application No. 10/648,389 discloses the claimed invention except for one of the pulleys having a one-way clutch. Adachi et al. disclose that the pulley (22a) is a driving pulley and requires a clutch so as to disconnect the pulley from the shaft so as not produce power when not required and to prevent slip but pulley (21a) may not require a clutch. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Matsui et al. to include a clutch to at least one pulley in view of Adachi et al. to disconnect the pulley from the shaft so as not produce power when not required and to prevent slip.

This is a provisional obviousness-type double patenting rejection.


Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP (2001-107827), Aoki et al. (6,027,032), DE (19604182), JP (07-149167), Tanaka et al. (6,397,808) and Matsui et al. (5,780,731) disclose a drive system of a vehicle. JP (57-140525) and JP (55-53152) disclose a drive system have two generators coupled by a belt.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marcus Charles
Primary Examiner
Art Unit 3682
AUG 27 08, 2005